and ratchet these standards up at a reasonable rate.

By 2020, the total average must meet the 35 miles per gallon—the total average. Some cars will be below it, and some will be above it—as long as the total average meets the standard. This gives Detroit the flexibility they say they need. I do not know why they will not understand it.

This effectively gives the automakers 13 years to get the job done, and it means fuel economy will increase across all classes—from the smallest sedans to the largest SUVs. It may be different by the class, but, nonetheless, it would increase, so that the average fuel economy would be 35 miles per gallon. At the same time, the measure establishes a credit trading program under the direction of the National Highway Transportation Safety Administration, known as NHTSA. NHTSA would design, run, and operate this credit trading program.

The provision was strongly recommended by the National Academy of Sciences in 2002. It would give an automaker a financial incentive to exceed the standards. If it does, it could sell credits to another automaker and profit from having a more fuel-efficient fleet. So that an automaker that makes a car that attains 37 miles a gallon can sell that differential to someone who cannot quite make it.

It would also allow the banking of these credits for up to 5 years—insurance if a company falls below the standard in a later year. If an automaker cannot meet the standards in a given year, they can purchase these credits, use bank credits, or borrow from projected surpluses from future years. So the bottom line is this is a practical, workable system which ensures substantial increases in fuel efficiency. Quite frankly, it is a major improvement over the current system, which has a much more rigid approach.

I want to say something. In all the time I have been working on this legislation, nobody from the automaker community has ever come to me to say: Look, we like this, but we don't like this. If you just changed it this way, it would appeal to us.

We have bent over backward to try to accommodate a bill to meet what for the past years—every time this comes up on the floor, I hear them argue: You can't evaluate small cars against big cars. Well, we don't do that in this bill.

Another thing we have done—and this was pursuant to Senator STEVENS' request and interest in the committee—this measure provides an off-ramp in 2020 in the unlikely event that there are substantial unforeseen costs.

The measure would give NHTSA the authority to set a standard lower or higher than the 35 miles per gallon in 2020. The authority could be invoked only if a thorough review of the costs of putting new technologies in our automotive fleet exceeds the agency's best estimate of the value to the Nation of setting the standard at this level. So that is the off-ramp. There can be an evaluation, a kind of cost-benefit look at the situation, and there would have to be clear and convincing evidence that the costs exceed the benefits. Obviously, we wanted to make it somewhat difficult—not a rollover so everybody could get out of it—somewhat difficult.

NHTSA would have to take into consideration billions of dollars in fuel savings, national security implications of reducing our dependence on foreign oil, the effect of global warming and air pollution, and, on the other side of the scale, additional costs to manufacturers and consumers. Given all of the clear and meaningful benefits, we believe automakers can and will be able to meet these standards, actually with little difficulty, but the provisions give NHTSA discretion in the event it becomes clear automakers cannot meet the standards down the road.

So that is what the bill does. The fact is, this legislation is past due. Our Nation has seen gas prices skyrocket over the past 5 years. It now costs $50, $60, or $70 to fill up a tank with gas. In my State of California, this is a big deal. People often have to use at least 2 tankfuls of gasoline, so instead of a tank at $20, if it is a tank at $70, instead of 4 times 20, which is $80, it is 4 times $70, just to drive to work.

In the long term, a key to reducing gas prices is to reduce demand for gasoline. By increasing fuel efficiency, we can reduce consumption and thereby reduce demand. Americans understand this. That is why, in poll after poll, the American people overwhelmingly support increased fuel efficiency. A poll published in April of this year by the New York Times and CBS shows that more than 90 percent of Americans favor legislation for acquiring more fuel efficient vehicles. Ninety percent. That is amazing. People want more fuel-efficient vehicles. A poll commissioned by the National Environmental Trust shows that more than 80 percent of truck owners favor higher fuel economy standards. That was done between April 28 and May 1 of this year. These results are consistent all across ideologic and geographic divides. Simply put, Americans by large majorities want improved mileage on their automobiles.

Now, some question whether the standards in this legislation are achievable. You have only to look at what other nations are doing to see that, in fact, they are. Canada has proposed raising its fuel economy standard to 32 miles per gallon by 2010—32 miles per gallon by 2010. Australia's fuel efficiency averages 29 miles per gallon and is expected to rise to 34 miles per gallon by 2010. Europe's fuel efficiency currently exceeds 40 miles per gallon, and that is expected to increase over the next few years. Japan's fuel efficiency averages 46.3 miles per gallon and is expected to rise to 48 miles per gallon by 2010. Even China will have a new vehicle fleet averaging 37 miles per gallon—not in 10 years, not in 5 years, but next year. So these standards have to be met by American automobile manufacturers manufacturing in China next year. They will have to meet 37 miles per gallon.

In the United States, it is 25 miles per gallon. This is really unacceptable. These higher standards are being met abroad by the same automakers who claim it is impossible to do it here in the United States. This includes BMW, DaimlerChrysler, Ford, General Motors, Porsche, Volkswagen, Honda, Mazda, Nissan, Subaru, and Toyota. All have agreed to push fuel economy well above 40 miles per gallon in Europe but say they cannot achieve these standards in the United States. Does that make sense to anybody in this body? I think not. Does it make sense to anyone in America? I think not.

Now, also, the simple truth is that the technology exists to achieve a 35-mile-per-gallon standard by 2020. Existing technology can do it. So as Detroit complains it can't do this or it can't do that, the National Academy of Sciences says it can.

This is what they tell us:

> We can increase the fuel economy—

This is what they say can be done, the National Academy of Sciences—

> of mid-sized SUVs to 34 miles per gallon with existing technology, large cars to 39 miles per gallon with existing technology, minivans to nearly 37 miles per gallon with existing technology, and large pickups to nearly 30 miles per gallon with existing technology. When you average all of this together, you will find that the fleet could achieve 37 miles per gallon, 2 miles more than this measure envisions.

This is a conservative estimate. The National Academy of Sciences study measured cost-effectiveness based on $1.50 per gallon as opposed to today's $3 per gallon. So now you can see how conservative it is. The academy didn't consider hybrids and other emerging technologies such as the popular Toyota Prius, just the standard American automobiles. So it is quite possible that even greater increases in fuel economy could be achieved.

Now, how can this all be done? By using existing technology and simple design improvements. Let me give my colleagues some of the things for which the technology already exists: better aerodynamics, alternater improvements, engine friction reduction, using more efficient transmissions, electric power steering, electric water pump, reduced engine friction, and using only engine cylinders that are necessary. These changes still could be made to great effect.

A 2006 study by the Canadian Government concluded that the cost-effective technologies identified by the 2002 National Academy of Sciences report remain available and more cost-effective than ever. Our current fleet is more powerful, accelerates more quickly, and brakes more effectively. But with all of these advances, there is one critical design feature we have not improved at all in 25 years: Today's cars get the lowest number of miles to the